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ABSTRACT

The findings of an exploratory study to determine the status of students who took marketing education in high school suggest that those students successfully continue their education at the university level. High school transcripts of 676 students in their junior year at a midwestern state university of more than 20,000 students were analyzed. This sample represented about 27 percent of the entire junior class of about 2,500 students. It included all business majors (352) during summer term 1991 and fall term 1991 and a randomly selected group of nonbusiness majors (324) who represented the other five colleges at the university. Of the 676 students in the sample, only 38 (5.62 percent) had taken high school marketing education courses. Of those who had taken high school marketing, 32 (84.21 percent) were business majors; 6 (15.79 percent) were nonbusiness majors. The average number of semesters of marketing education taken was twice as large (3.31 semesters) for business majors as for nonbusiness majors (1.5 semesters). Of the 32 students who had taken high school marketing education classes and had chosen a business major, 10 were specializing in marketing, 9 were in finance, 6 were in management, 4 were in business education and office administration, 2 were in accounting, and 1 was in business administration. (CML)

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# THE STATUS OF SECONDARY MARKETING EDUCATION STUDENTS AT THE UNIVERSITY LEVEL

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## ABSTRACT

The purpose of this study was to determine the status of university students who have taken marketing education in high school. High school transcripts of 676 junior-year students at a mid-western, state-supported university of over 20,000 students were analyzed. Business majors numbered 352 students and were compared with 324 non-business majors. In addition to the number of business and non-business majors who had earned high school marketing education credits, the grade point averages and number of high school marketing education credits taken by the two groups were compared. Although the study was exploratory in nature and appropriate statistical analysis was hindered because of small numbers, the findings suggested that former secondary marketing education students continue successfully their education at the university level.

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The Status of Secondary Marketing Education Students

## Introduction

Traditionally, secondary schools have provided three tracks for students--college prep, general, and vocational. Counselors advised students interested in an university education to pursue the college-prep track, students unsure of future plans to follow the general track, and students not qualified or interested in a college education to enroll in a vocational program. Supposedly, the vocational track would prepare non-college-bound students with skills to find employment upon graduation.

Historically, the view has been that college-bound students take academic subjects for preparation for an university education and do not take vocational subjects since they would not aid in this preparation. Conversely, vocational students did not enroll in academic subjects because they may be too difficult or hold no relevance. For years many educators and lay people alike, have believed and perpetuated this belief that the college-prep track and vocational track are parallel and students do not take classes from both areas. Stereotypically, this view has been manifested by the high school counselor advising an academically talented student away from courses tainted as vocational and suggesting a general math course in lieu of algebra for the vocational student.

Research reported in the February 1991, Phi Delta Kappan refutes this widely accepted belief that distinctive curricular tracks have segregated students from taking a variety of academic and vocational classes. The National Assessment of Vocational Education (1989) related that 97% of secondary students take at least one vocational course. Furthermore, Wirt (1991) communicated that the typical secondary student

takes more vocational education, 4.2 credits, than English, 4.0 credits. Additional analysis by Wirt, Muraskin, Goodwin, and Meyer (1989) discovered that:

> Surprisingly, college-bound students also take substantial amounts of vocational education--not just introductory industrial arts and consumer and homemaking education, but occupationally specific vocational Education. In fact, students planning to attend postsecondary vocational-technical training or college account for the vast majority of vocational credits, 26.5 and 47.9 percent of all vocational credits, respectively (see table 2.2). In contrast, work-bound students, despite their greater enrollments on average, account for only 25.2 percent of all vocational credits and only 26.4 percent of all occupationally specific vocational credits. (pp. 47 and 49) Wirt (1991) summarized this situation by stating "The vast majority of all students of all ability levels and backgrounds take vocational coursework" (p. 427).

Dispelling the misunderstanding of the alleged clear distinction between college-bound and vocational students is furthered supported by Stone (1992). He reported that 61 percent of vocational students enroll in some form of education beyond high school and nearly 50 percent of these students enter baccalaureate degree granting colleges and universities. However, Stone also presented in the same article the continuing myth that vocational education, including marketing education, prevents students from continuing their education. For the researcher, the question became is there further evidence to repudiate the myth that taking high school marketing education classes prevents students from continuing their education.

## The Problem

Therefore, this study was conducted to determine the status of secondary marketing education students at the university level. Specifically, answers to the following questions were sought:

1. How many university junior-year students took marketing education classes in high school?
2. How many credits of marketing education did those students take in high school?
3. What majors are most frequently chosen by those students who took marketing education in high school?
4. Is there a significant difference in the number of business majors who earned high school marketing education credits and non-business majors who earned high school marketing education credits?
5. Is there a significant difference in the number of high school marketing education credits earned by business and non-business majors?
6. Is there a significant difference in the number of high school marketing education credits earned by marketing majors and non-marketing business majors?
7. Is there a significant difference in the grade point average of business majors who took high school marketing education classes and non-business majors who took high school marketing education classes?

8. Is there a significant difference in the grade point average of majors who took high school marketing education classes and business majors who did not take high school marketing education classes?

As a result the following null hypotheses were tested:

Hypothesis I: There is no significant difference in the number of business majors who earned high school marketing education credits and non-business majors who earned high school marketing education credits.

Hypothesis II: There is no significant difference in the number of high school marketing education credits earned by business majors and non-business majors.

Hypothesis III: There is no significant difference in the number of high school marketing education credits earned by marketing majors and other business majors.

Hypothesis IV: There is no significant difference in the grade point average of business majors who earned high school marketing education credits and non-business majors who earned high school marketing education credits.

Hypothesis V: There is no significant difference in the grade point average of business majors who earned high school marketing education credits and business majors who did not take high school marketing education classes.

**Scope and Limitations of the Study**

The population for this study was confined to the junior-year students at a comprehensive, mid-western university of approximately 20,000 students. Thus, an assumption should not be made that the results were representative to other universities and student bodies.

Because of the exploratory nature of this study, it is limited to a description of junior-year university students who had and had not taken marketing education courses in high school. It is beyond the scope of this study to attempt to discover and explain any correlations and predictors of university performance based upon participation in high school marketing education classes.

**Definition of Terms**

To facilitate common understanding of the terms used in the context of this research, the following definitions may be helpful.

Marketing education--refers to any class listed on a high school transcript which is titled marketing education, marketing, marketing and distribution, distributive education, advertising, merchandising, retailing, selling, or other directly related marketing term.

Junior-year--refers to university students who have earned at least 63 semester credit hours at an institution which requires a minimum of 126 semester hours for graduation.

High school credits--each credit equal one semester of study in a subject completed satisfactorily.

Grade point average--refers to the numerical grade average based upon a four-point (4.0) scale.

Business majors--refers to students who have been admitted to the College of Business as juniors choosing to specialize in accounting, business education, marketing

education, office systems administration, economics, finance, management, or marketing.

**Significance of the Study**

Wirt (1991, p. 426) when describing the Carl D. Perkins Vocational and Applied Technology Education Act Amendments of 1990 wrote:

> The first major change of the new federal legislation is that it begins to shift away from the traditional job-skills orientation of vocational education and toward the broader purpose of using vocational education as a vehicle for learning academic and other kinds of thinking skills and linking thought with action. At both the secondary level and postsecondary level the legislation calls for the "integrationof academic and vocational education."

A further call for the integration of academics and vocational education is evident in Tech Prep programs. Mandated by the 1990 Perkins law, Tech Prep is an innovative curriculum designed to prepare students for a technological future. Through an articulated program providing both secondary and post-secondary education up to an associate degree, students are to be readied for successful employment and/or further education.

Therefore, the findings of this study may:

1. Provide assistance to marketing educators in proving that secondary marketing education classes do provide an integration of academic and vocational education which is helpful and not detrimental to students pursuing a university-level education.

2. Provide information to educational personnel about the value of including marketing education in Tech Prep programs.
3. Provide information for marketing educators and counselors which may be shared with secondary students to explain their opportunities and options in post-secondary and university education.

## Method

To obtain the necessary data, a review of high school transcripts was conducted. This section contains a description of the population, sample selection, data collection, and data analysis.

### Population

The population of this study consisted of the junior-year students at a comprehensive, mid-western university with an enrollment of slightly over 20,000. This university is state supported and is designated a Doctoral I institution by the Carnegie Foundation for the Advancement of Teaching. It offers 150 undergraduate, 80 master's, 20 doctoral, and 14 specialist's degree programs.

Juniors were selected as the population for two reasons. First, they were chosen because they have proven essentially their ability to complete successfully university-level work. Second, students are not admitted to the College of Business as a major until their junior year.

### Sample Selection

Two procedures were use to select students. Business majors selected were all juniors meeting the admission requirements to the College of Business at the

completion of the Summer Semester 1991, and the Fall Semester 1991. This group was made up of 352 students.

The non-business majors were randomly selected juniors representing the other five colleges (Applied Sciences and Technology, Architecture, Fine Arts, Sciences and Humanities, and Teachers College). These students were selected at the close of the Fall Semester 1991. The non-business majors in this sample numbered 324.

Thus, the total sample size for this study was 676 junior-year students. This sample size represented about 27 percent of the entire junior class of approximately 2,500 students.

**Data Collection**

Photocopies of the high school transcripts submitted by the students in the sample as a part of the admissions process were obtained from the University's Records Department. Each student's high school transcript was analyzed for marketing education courses and credits. For each student a file was created which included the student's major, GPA, and number of marketing education credits on the high school transcript.

**Data Analysis**

Questions 1, 2, and 3 of this study required the use of simple numerical tallies and the calculation of percentages.

Questions 4, 5, 6, 7 and 8 of this study generated five null hypotheses. To compare the differences in the groups for each of the five null hypotheses, the computerized statistical package SPSS was used to run t-tests on the data.

**Findings**

Question 1: How many university junior-year students took marketing education classes in high school?

Of the 676 students in the sample, 38 or 5.62% had taken high school marketing education courses. Thirty-two or 84.21% of the 38 students who had taken high school marketing education courses were business majors. Only six students in the sample of 676 students were non-business majors who had taken high school marketing education courses.

The sample consisted of 352 business majors; therefore, the 32 business majors who had taken high school marketing education courses represented 9.09% of business majors. The six non-business majors represented 1.85% of the 324 students in the sample who were not business majors.

Question 2: How many credits of marketing education did those students take in high school?

Combined the 38 students had taken 110 semesters of marketing education in high school for an average of 3.03 semesters per student.

It is interesting to note, however, the differences between those students with business majors and those non-business majors. The average number of semesters of high school marketing education was 3.31 for business majors and only 1.5 for non-

business majors. For the six non-business majors, three had taken only one semester of high school marketing education and three had taken two semesters. Of the 32 business majors, 17 had taken four or more semesters of high school marketing education.

Question 3: What majors were most frequently chosen by those students who had taken high school marketing education in high school?

Of the 32 students who had taken high school marketing education classes and had chosen a business major, the following lists the specific major chosen: 10 Marketing (12.98% of 77 in sample); 9 Finance (15% of 60); 6 Management (9.38% of 64); 4 Business Education and Office Administration (17.39% of 23); 2 Accounting (2.13% of 94); and 1 Business Administration (3.70% of 27). Three Economics majors and four International Business majors did not take high school marketing education classes. The six non-business majors who had taken high school marketing education courses had chosen Philosophy, Health Science, Psychology, Telecommunications, Nursing, and Special Education as majors.

Question 4: Is there a significant difference in the number of business majors who earned high school marketing education credits and non-business majors who earned high school marketing education credits?

Thirty-two business majors and six non-business majors were found to have earned marketing education credits from a sample of 676 junior-year university students.

HO I: There is no significant difference in the number of business majors who earned high school marketing education credits and non-business majors who earned high school marketing education credits. This hypothesis was rejected at the .05 level based upon the mean proportions of business majors with marketing education credits (9.1%) and non-business majors with marketing education credits (1.9%). However, because of the small number of non-business majors, the value of this statistical analysis is suspect.

Question 5: Is there a significant difference in the number of high school marketing education credits earned by business and non-business majors?

The 32 business majors who had taken high school marketing education classes had an average of 3.31 credits in high school marketing education. The six non-business majors who had taken high school marketing education classes had an average of 1.5 credits in high school marketing education.

HO II: There is no significant difference in the number of high school marketing education credits earned by business and non-business majors. This hypothesis was rejected at the .05 level based upon a t Value of 4.72 with 27.00 Degrees of Freedom. However, because of the small number of non-business majors, confidence may not be expressed in this statistical analysis.

Question 6: Is there a significant difference in the number of high school marketing education credits earned by marketing majors and non-marketing business majors?

Marketing majors who had taken high school marketing education classes averaged 3.0 credits of marketing education. Non-marketing business majors who had taken high school marketing education classes averaged 3.45 credits of marketing education.

HO III: There is no significant difference in the number of high school marketing education credits earned by marketing majors and other business majors. This hypothesis was rejected at the .05 level based upon a t Value of -.67 with 30 Degrees of Freedom. However, with one N of ten, no confidence may be expressed in this statistical analysis.

Question 7: Is there a significant difference in the grade point average of business majors who took high school marketing education classes and non-business majors who took high school marketing education classes?

The grade point average of business majors who took high school marketing education classes was 2.632 on a 4.0 scale. The grade point average of non-business majors who took high school marketing education classes was 2.497.

HO IV: There is no significant difference in the grade point average of business majors who had earned high school marketing education credits and non-business majors who had earned high school marketing education credits. This hypothesis is not rejected at the .05 level based upon a t Value of .72 with 36 Degrees of Freedom. Again, the small number of non-business majors who earned marketing education credits called into question this statistical analysis.

Question 8: Is there a significant difference in the grade point average of business majors who took high school marketing education classes and business majors who did not take high school marketing education classes?

As stated previously, the grade point average of business majors who took high school marketing education classes was 2.632. The grade point average of business majors who did not take high school marketing education classes was 2.711.

HO V: There is no significant difference in the grade point average of business majors who earned high school marketing education credits and business majors who did not earn high school marketing education credits. This hypothesis was not rejected at the .05 level based upon a t Value of -.86 with 348 Degrees of Freedom.

**Discussion**

This study was exploratory in nature. Therefore, when the questions and null hypotheses were developed the number of students in the sample who had taken high school marketing education classes was unknown. Because of the small number of students which made up one of the groups to be compared in questions 4, 5, 6, and 7, the findings are discussed in general and the results of the statistical analyses were not used.

A relatively small number of junior-years students (5.62%), 38 of 676 in the sample, had taken high school marketing education classes. However, of that number, nearly 85% had chosen a business major. Furthermore, the 32 junior-year business students who had earned high school marketing education credits,

represented nearly 10% of the 352 business majors included in the sample. The extremely low number of non-business majors who had earned high school marketing education credits, 6 out of 324 non-business majors in the sample, was curious. It may be an anomaly, but it may suggest further investigation is necessary.

The average student in the sample who had taken high school marketing education classes had earned approximately three credits in the subject. It is noted, however, that the students who had chosen a business major had over 3 credits (3.31), while the non-business majors earned only 1.5 credits in marketing education. Because of the small N, six non-business majors, the statistical significance may be suspect. Again, further research into this question appeared to be necessary.

Perhaps not surprisingly, Marketing was the most popular choice of major for business students who had taken high school marketing education classes, 10 of 32 students, 31.25%. However, as a percentage of the majors included in the sample, Finance (15%) and Business Education and Office Administration (17.39%) had a better representation of students who had earned high school marketing education credits than did Marketing (12.98%). Interestingly, Accounting which is the largest major in the College of Business had the lowest percentage of majors who had taken high school marketing education classes, 2 out of 94 (2.13%). Two small majors, Economics with three students in the sample and International Business with four students, had no representatives who had taken high school marketing education classes.

The ten students in the sample who had chosen a Marketing major and taken high school marketing education classes earned an average of three credits in the subject. The 22 other students who had chosen a non-Marketing business major and taken high school marketing education classes earned an average of 3.45 credits in the subject. Although, the statistical significance is disputed because of the small N, only ten marketing majors, it appeared an intriguing question had been raised. Further investigation may be called for.

The difference in grade point average between the business majors who had taken high school marketing education classes and non-business majors who earned credits in the subject was interesting, but no statistical significance was attached because of the small N. Consequently, further research is necessary concerning this question.

There appeared to be no significant difference in the grade point of business majors who had taken high school marketing education courses and business majors who had not taken high school marketing education courses.

In summary, this exploratory research indicated the following about the status of secondary marketing education students at the university level:

1. Compared to the total number of junior-year students, former high school marketing education students made up a small percentage of the student count.
2. Most junior-year students who had earned high school marketing education credits had chosen a business major. Marketing appeared to be the most

popular business majors for former high school marketing education students followed closely by Finance and Management.

3. University junior-year students who earned high school marketing education credits were academically successful.

Consequently, the findings of this study suggested that taking high school marketing education classes does not prevent students from continuing their education at the university level. Indeed, based upon the academic success of the former high school marketing education students included in this study, the results have indicated that secondary marketing education students may qualify for admission and make satisfactory academic progress at the university level.

**Recommendations**

The following recommendations are offer by the investigator:

1. The results of this study and others related to the success of vocational education students at the university level be shared with various audiences to assist in dispelling the myth that vocational education prevents students from furthering their education.
2. Local marketing education personnel should become familiar with the admissions standards for colleges and universities which are of interest to students and demonstrate to the students how they can met admission requirements and take marketing education classes.
3. Further research be conducted to determine the degree of success of secondary marketing education students at the university level.

4. More investigation be completed concerning the integration of vocational education and academics in marketing education classes and the value of this integration for Tech Prep programs and students furthering their education.
5. Additional research be done to determine the existence, if any, of correlations among variables such as number of marketing education high school credits and university grade point average.
6. Further research be conducted to identify specifically the value of secondary marketing education for students continuing their education at higher levels.

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